What's New Autodesk Inventor 2021

Autodesk Inventor continues to bring new updates and enhancements to our customer's everyday experience. This document will describe key new features and updates in the 2021 release highlighted for launch.

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Key message

The latest release of Autodesk® Inventor® is packed with user-requested updates and enhancements to help speed up your design workflows, reduce repetitive tasks, and work the way you want.

Overview of updates for Inventor 2021

Feature/Enhancement	Benefit to user
AnyCAD for Revit	Maintain associative links between Autodesk® Revit® and Inventor® data with AnyCAD for seamless interoperability.
Drawing automation	Speed up drawing creation with updates to sheet formats and iLogic.
Frame Generator enhancements	Create and document structural members faster with improvements to the user interface and editing tools.
Inventor experience	Declutter your workspace with new options in the property panel and experience the new dark theme option for a low-light environment.
Performance improvements	See the performance improvements in part, assemblies, and frame design.
Assembly modeling improvements	See enhancements with assemblies for tube and pipe, assembly structure, and file naming.
Part modeling improvements	Save time with part-level enhancements for sheet metal, multibody parts, and 3D annotations.
Drawing creation improvements	Streamline your workflows with drawing-level enhancements and new commands.



Ways to describe in 100 words or less

100 words	The latest release of Autodesk® Inventor® is packed with new features and updates to help you focus more time on design and innovation. You'll find modeling improvements for tools you use the most—like Frame Generator, now with time-saving features for file naming, category filtering, and editing. Speed up your design workflows with customer-requested enhancements for assemblies, parts, and drawing creation. Maintain associative links between Autodesk® Revit® and Inventor data for seamless BIM and MCAD interoperability. And work the way you want with new contextual property panels and dark theme appearance option. All this, plus an increase in performance for better productivity, even as your designs increase in size and complexity.
75 words	The latest release of Autodesk® Inventor® is packed with updates to help you focus on design and innovation. You'll find modeling improvements for tools you use the most, along with customer-requested enhancements to speed up workflows for assemblies, parts, and drawing creation. Create BIM-ready designs and maintain associative links between Autodesk® Revit® and Inventor data with new AnyCAD functionality. And work the way you want with new contextual property panels and dark theme appearance option.
50 words	The latest release of Autodesk® Inventor® is packed with user-requested updates and enhancements to help you speed up your design workflows, reduce repetitive tasks, and work the way you want with new contextual property panels and appearance options—all so you can focus on your project—not your busywork.
25 words	The latest release of Autodesk® Inventor® is packed with user-requested updates and enhancements to help speed up your design workflows, reduce repetitive tasks, and work the way you want.
15 words	The latest release of Autodesk® Inventor® is packed with updates to help you work the way you want.
	Work the way you want with the updates inside the latest release of Autodesk® Inventor®.

Categorized descriptions

In this section, you'll find detailed information on the updates and enhancements in the 2021 release. (Copy sourced from <u>Autodesk Knowledge Network</u> where you will find even more technical detail and visuals for Inventor releases throughout the year.)

Professional-Grade

Autodesk Inventor 2021 is professional-grade with several productivity enhancements made for Frame Generator—including file naming, new category filter, editing capabilities, and more.

Frame Generator Enhancements

- Improvements have been made to the file naming dialog, enabling you more detailed control of your naming schemes for frame generator components—including a new ability to set the file name of the component to be the same as the display name in the browser.
- When creating frames, a new category filter enables you to narrow down your selection, and pre-set configurations now help you save your most frequently used frame settings for use again later.
- Geometry can now be filtered from within the property panel, and a new preview glyph helps you to orient your frame as you select skeleton geometry.
- New zoom tools help you orient your frame by adjusting your view to look directly at the frame section or to an isometric view of the frame member you are placing—before zooming back to see the entire design.
- The frame member 'trim' tool has been improved, enabling you to trim members to a curved frame.
- End treatments, two new notch profiles have been added, extending notch support to 'I,' 'T,' and 'C' profile channels as well as circular members.



• The frame member re-use command has had a significant overhaul, making it easier to re-use existing frame members to populate your skeleton geometry.

Connected

Autodesk Inventor 2021 extends AnyCAD functionality for Autodesk Revit to help manufacturers in the construction industry collaborate and coordinate on BIM projects.

Revit AnyCAD

• There is improved interoperability between Revit and Inventor by maintaining an associative link to inserted Revit data as you work. The Revit project can be accessed from a local file or coordinated via the cloud using the Autodesk BIM 360 common data environment.

Changes during the design process are inevitable. When the Revit model changes, you'll need to
update the Inventor model to suit. Because the Revit model is referenced into your Inventor
Assembly, any changes to the Revit project will also update inside the Inventor assembly—and without
file translation.

Automated

Sheet Formats and iLogic make it easier than ever to automate the creation of drawings to your CAD standard in Autodesk Inventor 2021.

Sheet Formats

- View layouts saved as sheet formats now retain view settings such as edge display and include a new 'Fit to view' option to automatically scale your views to fit onto your sheet.
- Sheet formats now support flat patterns for part models and parts list for assemblies, all automatically populating from the model you reference during sheet creation.

iLogic

- To further help you automate the creation of drawings, you'll find an improved ability for iLogic to add dimensions, holes notes, and balloons from labeled features.
- It's now easier to change drawing styles to suit your customer—or batch-edit styles to aid CAD standard compliance—with added support for drawing styles using iLogic.

Customer-driven

Autodesk Inventor 2021 continues to deliver enhancements requested by you and the Inventor user community. Your feedback has helped us to make improvements to parts, assemblies, and drawings.

Parts

Autodesk Inventor 2021 delivers part-level enhancements for sheet metal, multi-body parts, and 3D annotations.

- Significantly reduce mouse clicks by using the familiar window selection for selecting multiple bodies and faces in your parts.
- The unwrap command gets even with additional options for constraining planar holes and alignment of the unwrapped surface.
- Sheetmetal flange angles can now refer to existing edges and faces for the specified angle—no
 more formulas or equations to maintain associativity.

Autodesk Inventor 2021 delivers assembly-level enhancements for tube and pipe, assembly structure, and file naming conventions.

Assemblies

- File naming dialog has extended to the 'Mirror' and 'Copy' commands.
- There are improvements to file naming for the Frame Generator and tube and pipe designs.
- The route command for tube and pipe now as a new property panel enabling you to re-name routes without leaving the command.
- When you have more than one route to create, the apply button in the route command now keeps you in the command for the next one.
- When saving files, you'll find new options to help set the default behavior for whether files should be saved or not, and a new 'Save State' column in the save dialog to help you understand what files Inventor is prompting you to save and why.



- To help you structure your assembly environment, you'll find the functionality last seen in the shaft component generator to bolted connections.
 - With this option active, no folder or sub-assembly will be created on disk, and the individual components will be inserted directly into your assembly.

Autodesk Inventor 2021 delivers drawing level enhancements with automated documentation tools to better streamline your workflows.

- Components set to 'reference' in the Inventor BOM have new visibility options in drawings, with additional options to show reference files in color, and with or without a dashed outline.
- The ability to add automated centerlines to drawing views has been made easier to discover, with a new button for the automated centerline command in the ribbon.
- When dimensioning your views, we have improved the ability for Inventor to detect diameter dimensions for side views or section views, even when selecting parallel geometry.
- The new 'align to geometry' option in the dimension command enables you to align dimensions to any drawing geometry.
- To help complete your documentation, there is a streamlined workflow for copying and pasting general tables within a drawing sheet.
- By popular request, the measure tool has returned to the drawing environment, enabling the ability to take additional measurements from Inventor drawings, without creating additional annotations.

Inventor Experience

Autodesk Inventor 2021 is committed to providing you a customizable and productive experience so you can work the way you want and keep your design clear of feature commands.

Modern UX

Drawings

- Work the way you want using the new alternate 'Dark Theme' appearance when you prefer a lowlight environment
- Productivity keeps getting better as new commands are added to the property panel, which includes new options.
- Declutter your workspace and increase productivity as Inventor adds more commands to the property panel.

Performance

Work more productively with your increasingly larger and more complex designs.

- For assembly design, performance has been improved when inserting sub-assemblies, from the time of insertion—to the time that you have control over the sub-assembly position, eliminating the wait time before you start to place your components.
- Inventor 2021 is now faster to respond when selecting many components at one time using window selection or component filtering.
- Experience quicker visibility changes when flipping the visibility of components directly, or using saved views.
- The responsiveness of component-related features in the assembly environment has been improved.
- Adaptative components are quicker to respond to changes in assembly relationships, and component patterns based on the feature pattern within a part file are faster to respond to change.



Additional resources

Updated Inventor logos, badging, and icons are in <u>the DAM</u> (login required). Below are quick links to the essentials:



Logos found <u>here</u>

Package contains one-line and stacked versions with and without release year in EPS format for print and PNG format for screen.



Badges found here

Package contains "album cover" badges sized 256px, 1024px, and 2048px in JPG format.



Icons found here

Package contains letterform icons sized 128px, 128pxHD (for retina display) and 400px for social media (Twitter, Facebook, etc.) in PNG format.

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